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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,522	03/30/2001	Oliver Pfaff	1454.1055/MJ	1209

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EXAMINER	
MAURO JR, THOMAS J	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/806,522	PFAFF, OLIVER	
	Examiner	Art Unit	
	Thomas J. Mauro Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20010731*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 have been cancelled by preliminary amendment dated 3/30/2001. Accordingly, claims 9-20 have been newly added. Claims 9-20 are pending and are presented for examination. A formal action on the merits of claims 9-20 follows.

Drawings

2. The drawings are objected to because they fail to show the necessary textual labels of the various features in Figure 1. Each element in Figure 1 must be labeled as described in the specification. A descriptive textual label for each numbered element in the figures would be necessary for one to fully understand the figures without substantial analysis of the detailed specification. Any structural detail that is of sufficient important to be described should be shown and properly labeled in the drawings. See 37 CFR 1.84(n) and (o). A proposed drawing correction or corrected drawings are required in replay to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsuchiya et al. (U.S. 6,118,784).

With respect to claim 9, Tsuchiya teaches an arrangement for specifying digital data on the basis of the Internet Protocol, comprising:

a first network layer to process the data according to a first Internet Protocol and to produce data having a first Internet Protocol format **[Tsuchiya -- Figures 3 and 4 and Col. 6 lines 42-56 – Ipv4 terminal (2) sends request using domain name of Ipv6 terminal (Msg. A) in order to connect an access Ipv6 terminal (5). Thus, information from Ipv4 terminal passes through OSI model layers to produce a packet in a first Internet Protocol format]**;

an intermediate layer to map the data having the first Internet Protocol format to a generic intermediate data format **[Tsuchiya -- Figures 3, 4 and 5, Col. 6 lines 56-67 – Col. 8 lines 1-36 – Once Ipv4 terminal sends request, Ipv4-Ipv6 converting apparatus obtain Ipv6 address of destination terminal from DNS server, looks up or obtains equivalent Ipv4 address, allows packet to be transmitted from Ipv4 terminal. Upon sending, Ipv4-Ipv6 converting apparatus sends the packet to the IP header converting means to replace the Ipv4 source and destination addresses to equivalent Ipv6 source and destination addresses. These intermediary steps and data formats produced anticipate this limitation]**; and

a second network layer to process the data mapped to the intermediate data format according to a second Internet Protocol to produce data having a second Internet Protocol format **[Tsuchiya -- Figures 3-5 and Col. 8 lines 36-41 – Ipv6 packet is sent, received and processed by Ipv6 terminal (5) in the second Internet Protocol format, i.e. Ipv6. Thus, information in**

the Ipv6 terminal passes through OSI model layers to be processed after being converted to the second Internet Protocol format].

With respect to claim 10, Tsuchiya teaches

an arrangement for decoding digital data existing in a second Internet Protocol format, comprising:

a second decoding unit to decode the data existing in the second Internet Protocol format according to a second Internet Protocol and to produce data having a decoded second Internet Protocol format **[Tsuchiya -- Figures 3 and 6, Col. 8 lines 44-54 – Ipv6 terminal (5) sends request using domain name of Ipv4 terminal (Msg. K) in order to connect an access Ipv4 terminal (2). Thus, information from Ipv6 terminal passes through OSI model layers to produce a packet in a second Internet Protocol format]**;

a mapping unit to map the data having the decoded second Internet Protocol format to an intermediate data format **[Tsuchiya -- Figures 3, 6 and 7, Col. 8 lines 55-67 – Col. 10 lines 1-38 – Once Ipv6 terminal sends request, Ipv4-Ipv6 converting apparatus obtains Ipv4 address of destination terminal from DNS server, looks up or obtains equivalent Ipv6 address, allows packet to be transmitted from Ipv6 terminal. Upon sending, Ipv4-Ipv6 converting apparatus sends the packet to the IP header converting means to replace the Ipv6 source and destination addresses to equivalent Ipv4 source and destination addresses. These intermediary steps and data formats produced anticipate this limitation]**; and

a first decoding unit to decode the data mapped to the intermediate data format according to a first Internet Protocol and to produce decoded data **[Tsuchiya -- Figures 3 and 6-7 and Col.**

10 lines 38-44 – Ipv4 packet is sent, received and processed by Ipv4 terminal (2) in the first Internet Protocol format, i.e. Ipv4. Thus, information in the Ipv4 terminal passes through OSI model layers to be processed after being converted, i.e. decoded, into the first Internet Protocol format].

With respect to claims 11 and 12, Tsuchiya further teaches wherein the intermediate layer/mapping unit has a parameter determination unit for determining parameters which are required for coding the data having the first Internet Protocol format and producing data in the second Internet Protocol format **[Tsuchiya -- Figures 1, 2, 4 and 5, Col. 6 lines 10-14 and Col. 7 lines 13-33 – IP address conversion table provides a correlation between Ipv4 addresses and Ipv6 addresses. In this case, the parameters are the Ipv6 address information determined from the conversion table necessary for converting between Ipv4 (first protocol) and Ipv6 (second protocol)]**.

With respect to claims 13 and 14, Tsuchiya further teaches wherein the parameter determination unit is designed on the basis of at least one of the following types:

the parameter determination unit is configured depending on the arrangement itself;

the parameter determination unit is configured depending on a user of the arrangement;

the parameter determination unit is configured depending on a process currently being carried out by the arrangement; and

the parameter determination unit determines the necessary parameters from a database to which the arrangement has access **[Tsuchiya -- Figures 1-2, Col. 6 lines 10-14 and Col. 7 lines**

13-33 – Necessary parameters, i.e. correlated IP address (either Ipv4 or Ipv6) are determined from a table, i.e. database, which is accessed by the Ipv4-Ipv6 conversion apparatus].

With respect to claims 15-20, these are method claims corresponding to the arrangement claimed in claims 9-14 above. They have similar limitations; therefore, claims 15-20 are rejected under the same rationale.

5. Claims 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimadoi et al. (U.S. 6,400,729).

With respect to claim 9, Shimadoi teaches an arrangement for specifying digital data on the basis of the Internet Protocol, comprising:

a first network layer to process the data according to a first Internet Protocol and to produce data having a first Internet Protocol format **[Shimadoi -- Figures 1, 2, 7, 9, Col. 4 lines 18-23 and lines 40-53 and Col. 5 lines 25-29 – Node A's network protocol layers process data in accordance with protocol A (first protocol)]**;

an intermediate layer to map the data having the first Internet Protocol format to a generic intermediate data format **[Shimadoi -- Figures 1, 2, 7, 9, Col. 4 lines 41-49, Col. 5 lines 25-33 and lines 56-60 and Col. 9 lines 36-55 – Information from node A contained in protocol A is**

converted by adding converting information to protocol B (second protocol) for node B]; and

a second network layer to process the data mapped to the intermediate data format according to a second Internet Protocol to produce data having a second Internet Protocol format **[Shimadoi -- Figures 1, 2, 7, 9, Col. 4 lines 18-23 and lines 40-53, Col. 5 lines 29-35 and Col. 9 lines 36-55 – Data is processed by Node B operating using network protocol B after being converted from protocol A]**.

With respect to claim 10, Shimadoi teaches

an arrangement for decoding digital data existing in a second Internet Protocol format, comprising:

a second decoding unit to decode the data existing in the second Internet Protocol format according to a second Internet Protocol and to produce data having a decoded second Internet Protocol format **[Shimadoi -- Figures 1, 3, 7, 9, Col. 4 lines 18-23 and Col. 5 lines 44-49 – Node B's network protocol layers process data in accordance with protocol B (second protocol)]**;

a mapping unit to map the data having the decoded second Internet Protocol format to an intermediate data format **[Shimadoi -- Figures 1, 3, 7, 9, Col. 4 lines 41-49, Col. 5 lines 44-52 and lines 56-60 and Col. 10 lines 10-14 – Information from node B contained in protocol B**

is converted by adding converting information to protocol A (first protocol) for node A];

and

a first decoding unit to decode the data mapped to the intermediate data format according to a first Internet Protocol and to produce decoded data **[Shimadoi -- Figures 1, 3, 7, 9, Col. 4 lines 18-23 and lines 40-53, Col. 5 lines 49-55 and Col. 10 lines 10-14 – Data is processed by Node A operating using network protocol A after being converted from protocol B]**.

With respect to claims 11 and 12, Shimadoi further teaches wherein the intermediate layer/mapping unit has a parameter determination unit for determining parameters which are required for coding the data having the first Internet Protocol format and producing data in the second Internet Protocol format **[Shimadoi -- Col. 5 lines 63-67 – Col. 6 lines 1-9, Col. 10 lines 27-49 – Parameters, such as CMDid and other control code parameters, are determined and added to provide the necessary configuration information to convert between protocol "A" and protocol "B"]**.

With respect to claims 13 and 14, Shimadoi further teaches wherein the parameter determination unit is designed on the basis of at least one of the following types:

the parameter determination unit is configured depending on the arrangement itself **[Shimadoi -- Col. 8 lines 40-60 and Col. 10 lines 41-54 – Depending upon the connections, i.e. Ethernet, serial, RS-232, etc., different converting ID's and control codes will be necessary based upon the arrangement]**;

the parameter determination unit is configured depending on a user of the arrangement;

the parameter determination unit is configured depending on a process currently being carried out by the arrangement; and

the parameter determination unit determines the necessary parameters from a database to which the arrangement has access.

With respect to claims 15-20, these are method claims corresponding to the arrangement claimed in claims 9-14 above. They have similar limitations; therefore, claims 15-20 are rejected under the same rationale.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hamamoto et al. (U.S. 6,038,233) discloses a translator for coupling a first network employing a first protocol (Ipv4) with a second network employing a second protocol (Ipv6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mauro Jr. whose telephone number is 703-605-1234. The examiner can normally be reached on M-F 8:00a.m. - 4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJM
July 22, 2004

DAVID WILEY
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